Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work-"Improvements To Roads And Drains at Kenchenahalli SC/St Colony In Kempegowda Ward No-01

					Estimate Cost			100.00 Lakhs	
Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
1	Removing And Resetting Of Footpath Slab [Approved Rate]								
	(Yelahanka zone) Appproved Rate	235.00							
		Sqm							
	Ward-01								
	Kenchenahalli								
	Main Rd		2	275.00	0.90		495.00		
	3rd Main Rd(Samudhyaa Bhavana Rd]		2	78.00	0.75		117.00		
			1	111.00	0.75		83.25		
	Railway Parallel Rd		1	200.00	0.45		90.00		
							785.25		
	Consider 60 %						471.15		
	Deduct 20% Missing/ Damaged Slab						117.79		
							353.36	235.00	83,040.19
2	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work . (V-I.No 1.4,Page No-5 CSR 2023-24) & (V-III Page No.5, Item No.1.1C of CSR 2023-24)								
	Basic rate	242.00							
	loading And Unloading	86.00							
	Sub Total	328.00							
	Area Weightage 10%	32.80							
	Total	360.80							
		Cum							
	Ward-01								
	RCC Drain								
	Kenchenahalli								
	1st Cross Rd		2	115.00	1.00	0.90	207.00		
	3rd Cross Rd		1	83.00	1.00	0.90	74.70		
	4th Main Rd		2	100.00	1.00	0.90	180.00		
	RCC Culverts								
			1	13.00	1.80	0.90	21.06		
			2	5.00	1.50	0.90	13.50		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Rcc Drain Desilt								
	Kenchenahalli								
	Main Rd								
	3rd Main Rd(Samudhyaa Bhavana Rd)		2	275.00	0.60	0.90	297.00		
			2	78.00	0.45	0.55	38.61		
	Railway Parallel Rd		1	111.00	0.45	0.45	22.48		
			1	200.00	0.45	0.45	40.50		
	Deduct 10% Voids						894.85		
							89.48		
3	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) **Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates** (V-1, P.No-15, I No-2.1.3 of CSR 2023-24)						805.36	360.80	290570
	Basic rate	**5989.00**							
	Area Weightage 10%	**598.90**							
	Total	**6587.90**							
		Cum							
	RCC Drain								
	Kenchenahalli								
	1st Cross Rd		2	115.00	1.00	0.15	34.50		
	3rd Cross Rd		1	83.00	1.00	0.15	12.45		
	4th Main Rd		2	100.00	1.00	0.15	30.00		
	RCC Culverts								
			1	13.00	1.80	0.15	3.51		
			2	5.00	1.50	0.15	2.25		
							82.71	6587.90	544885
4	Supplying, fitting and placing **TMT FE 550 / 550D Steel Reinforcement** including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification.All other type of structures .(V-I, I.No 2.11 h Page No 18,CSR 2023-24)								
	Basic rate	**79011.00**							
	Area Weightage 10%	**7901.10**							
	Total	**86912.10**							
		Ton							
	Consider 60kg/Cum For Drain		1	150.05	60.00		9003.15		
	Consider 90kg/Cum For Culvert		1	12.65	90.00		1138.32		
							10141.47		
							10.14	86912.10	881416

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) **M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates** (V-1,P.No.16, I.No.2.4.2 of CSR 2023-24)& (Addendum I , V-1, P.No.111 of CSR 2023-24)								
	Basic rate	**6323.00**							
	Formwork 35%	**2213.05**							
	Sub Total 1	**8536.05**							
	Area Weightage 10%	**853.61**							
	Total	**9389.66**							
		Cum							
	RCC Drain Raft								
	Kenchenahalli								
	1st Cross Rd		2	115.00	0.75	0.15	25.88		
	3rd Cross Rd		1	83.00	0.75	0.15	9.34		
	4th Main Rd		2	100.00	0.75	0.15	22.50		
	RCC Drain Wall								
	Kenchenahalli								
	1st Cross Rd		4	115.00	0.15	0.60	41.40		
	3rd Cross Rd		2	83.00	0.15	0.60	14.94		
	4th Main Rd		4	100.00	0.15	0.60	36.00		
							150.05		
	RCC Drain Coping								
	Kenchenahalli								
	Main Rd		4	275.00	0.15	0.10	16.50		
							16.50		
	RCC Culverts Raft								
	RCC Culverts								
			1	13.00	1.50	0.20	3.90		
			2	5.00	1.20	0.20	2.40		
	RCC Culverts Wall								
			2	13.00	0.23	0.60	3.59		
			4	5.00	0.23	0.60	2.76		
							12.65		
							179.20	**9389.66**	**1682630.87**
6	Providing and fixing precast reinforced cement concrete covering slabs of 10Cm thick made of M20 with OPC cement, with 20mm and down size graded granite metal coarse aggregate @0.70cum and fine aggregate & 0.74 cum with superplasticizer machine,mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges of slabs with TMT steel (Fe500) cost of all materials, labour, all lead and lift, HOM of machinery, curing, including cost of reinforcement etc., complete as directed by the Engineer in charge of the work.(Exclusive of GST) Approved Rate								
	(Yelahanka zone) Data Rate	**2072.00**							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
		Sqm							
	Kenchenahalli								
	1st Cross Rd		2	115.00	0.75		172.50		
	3rd Cross Rd		1	83.00	0.75		62.25		
	4th Main Rd		2	100.00	0.75		150.00		
	Damaged/ Missing Slab From Item No-01						117.79		
							502.54	2072.00	104128
7	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) **Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregates** (V-I Page No.15, Item No.2.1.4 of CSR 2023-24)								
	Basic rate	6217.00							
	Area Weightage 10%	621.70							
	Total	6838.70							
		Cum							
	For Below Kerb Stone								
	Kenchenahalli								
	Main Rd		2	275.00	0.20	0.10	11.00		
							11.00	6838.70	75,225
8	**Removing and resetting of precast kerb stones** fixed with CM 1:3 fixed and finished in line as per direction of Engineer in charge. (The cost of PCC shall be paid extra) (V-III, P.No.95, I.No.10.17 of PW, CSR 2023-24)								
	Basic rate	35.00							
	Area Weightage 10%	3.50							
	Total	38.50							
		M							
	For Kerb Stone								
	Kenchenahalli								
	Main Rd		2	275.00			550.00		
							550.00		
	Deduct 30% Missing/ Damaged Kerb Stone						165.00		
							385.00	38.50	14,822.50
9	**Providing and fixing pre cast solid cement concrete kerb stones** made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer in Charge of the work (excluding GST and Area Leading Charges) (Approved Rate)								
	(Yelahanka zone) Data Rate	507.00							
		Nos							
	Damaged/ Missing Kerb Stone From Item No-8						165.00		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							165.00		
	Total Length/Length of Kerb=No of Kerb								
							367.00	507.00	186069.00
10	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces (V-III, P.No.66, I.No.8.10 of PW, CSR 2023-24)								
	Basic rate	109.00							
	Area Weightage 10%	10.90							
	Total	119.90							
		Sqm							
	Kenchenahalli								
	Main Rd		2	275.00		0.35	192.50		
							192.50	119.90	23,080.75
11	Providing and fixing precast reinforced cement concrete covering slabs of 23Cm thick made of M25 with OPC cement,@340kgs/cum with 20mm and down size graded granite metal coarse aggregate @0.70cum and fine aggregate & 0.74 cum with superplasticizer machine,mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges of slabs with TMT steel (Fe500) cost of all materials, labour, all lead and lift, HOM of machinery, curing, including cost of reinforcement etc., complete as directed by the Engineer in charge of the work.(Exclusive of GST) Approved Rate								
	(Yelahanka zone) Data Rate	5037.00							
		Sqm							
	RCC Culverts Slab								
			1	13.00	1.50		19.50		
			2	5.00	1.20		12.00		
							31.50	5037.00	158665.50
12	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separatel (V-III Page No.10, Item No.2.19 of PWD SR 2021-22)								
	Basic rate	422.00							
	Area Weightage 10%	42.20							
	Total	464.20							
		Cum							
	For CC Road								
	Ward-01								
	Kenchenahalli								
	4th Main Rd		1	100.00	4.00	0.25	100.00		
							100.00		
	Deduct 25%						25.00		
							75.00	464.20	34,815.00

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
13	**Earth work in surface excavation by mechanical means** for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work In all kinds of soils upto 300 mm depth ((V-I, P.No-8, I No-1.12 of CSR 2023-24)								
	Basic rate	**95.00**							
	Area Weightage 10%	**9.50**							
	Total	**104.50**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Ward-01								
	Kenchenahalli								
	Main Rd		1	298.50	2.50	0.25	186.56		
	3rd Main Rd{Samudhyaa Bhavana Rd]		1	78.00	0.50	0.25	9.75		
							196.31	**104.50**	20,514
14	By Mix in Place Method Construction of **Granular Sub-Base** of required grading as per design spreading in uniform layers with motor grader on prepared surface mixing by mix in place method with front end loader at OMC and compacting with vibratory roller to achieve the desired density, complete as per clause 401 For Grading -V Material (Vol. 3, P. No. 23, I. No. 4.2 v) of CSR 2023-24)								
	Basic rate	**2359.00**							
	Area Weightage 10%	**235.90**							
	Total	**2594.90**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Ward-01								
	Kenchenahalli								
	Main Rd		1	298.50	2.50	0.10	74.63		
							74.63	**2594.90**	193644
15	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density (V-III, P.No-26,I No-4.17)of CSR 2023-24).								
	Basic rate	**2559.00**							
	Area Weightage 10%	**255.90**							
	Total	**2814.90**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Ward-01								
	Kenchenahalli								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Main Rd								
	3rd Main Rd(Samudhyaa Bhavana Rd]		1	298.50	2.50	0.225	167.91		
			1	78.00	0.50	0.225	8.78		
							176.68	2814.90	497340.05
16	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (V-III, P.No-31,I No-5.1(i) of CSR 2023-24).								
	Basic rate	41.00							
	Area Weightage 10%	4.10							
	Total	45.10							
		Sqm							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Ward-01								
	Kenchenahalli								
	Main Rd		1	298.50	2.50		746.25		
	3rd Main Rd(Samudhyaa Bhavana Rd]		1	78.00	0.50		39.00		
							785.25	45.10	35,414.78
17	Prôviding and applying tack coat with VG-10 Bitumen using pressure distributor at the rate of 0.20 kg/m2on the prepared bituminous surface cleaned with mechanical broom.(V-III, P.No-43,I No-5.32 of CSR 2023-24).								
	Basic rate	12.00							
	Area Weightage 10%	1.20							
	Total	13.20							
		Sqm							
	For BC								
	Ward-01								
	Kenchenahalli								
	Main Rd		1	298.50	6.80		2029.80		
	3rd Main Rd(Samudhyaa Bhavana Rd]		1	78.00	6.00		468.00		
							2497.80	13.20	32,970.96
18	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects. (V-III, P.No-35,I No-5.12C of CSR 2023-24).								
	Basic rate	9449.00							
	Area Weightage 10%	944.90							
	Total	10393.90							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Ward-01								
	Kenchenahalli								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Main Rd								
	3rd Main Rd(Samudhyaa Bhavana Rd]		1	298.50	2.50	0.05	37.31		
	Profile Correction		1	78.00	0.50	0.05	1.95		
	Kenchenahalli								
	Main Rd								
			1	298.50	0.80	0.05	11.94		
							51.20	**10393.90**	**532193.66**
19	Providing and laying **Bituminous Concrete** with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects (V-III, P.No.38, I.No.5.16C of CSR 2023-24).								
	Basic rate	**10954.00**							
	Area Weightage 10%	**1095.40**							
	Total	**12049.40**							
		Cum							
	For BC								
	Ward-01								
	Kenchenahalli								
	Main Rd		1	298.50	6.80	0.04	81.19		
	3rd Main Rd(Samudhyaa Bhavana Rd]		1	78.00	6.00	0.04	18.72		
							99.91	**12049.40**	**1203879.65**
20	Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing. (V-III Page No.49, Item No.6.1 of CSR 2023-24)								
	Basic rate	**4920.00**							
	Area Weightage 10%	**492.00**							
	Total	**5412.00**							
		Cum							
	For CC Road								
	Ward-01								
	Kenchenahalli		1	100.00	4.00	0.15	60.00		
	4th Main Rd						**60.00**	**5412.00**	**324720.00**

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
21	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity andappropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14-days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work.(V-III, P.No-148,I No-16.28, CSR								
	Basic rate	6754.00							
	Area Weightage 10%	675.40							
	Total	7429.40							
		Cum							
	For CC Road								
	Ward-01								
	Kenchenahalli								
	4th Main Rd		1	100.00	4.00	0.15	60.00		
							60.00	7429.40	445764.00
22	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.(V-III,I No-8.15, P.No-67 of CSR 2023-24)								
	Basic rate	530.00							
	Area Weightage 10%	53.00							
	Total	583.00							
		Sqm							
	For Edge Line								
	Ward-01								
	Kenchenahalli								
	Main Rd		2	298.50	0.10		59.70		
	3rd Main Rd(Samudhyaa Bhavana Rd)		2	78.00	0.10		15.60		
							75.30	583.00	43,899.90
23	Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 100 t.km (V-III Page No.5, Item No.1.4C of CSR 2023-24)								
	Basic rate	8.00							
	10KM Lead = 8*10	80.00							
	Area Weightage 10%	8.00							
	Total	88.00							
		t.Km							
	Qty frm Item No-2		1	805.36	1.28		1030.86		
	Qty frm Item No-12		1	75.00	2.10		157.50		
	Qty frm Item No-13		1	196.31	1.28		251.28		
							1439.64	88.00	126688.70

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
								Total Construction Cost	8473514.52
								18% GST For S.R Items	1525232.61
								Sub Total 1	9998747.14
								Utility Shifting,Miscellaneous and Rounding off	1,252.86
								GRAND TOTAL	10000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2023-2024,

Data Rates

Assistant Engineer
Ward-01
BBMP Bangalore

Asst. Executive Engineer
Yelahanka Sub Division
BBMP Bangalore

Executive Engineer,
Yelahanka Division
BBMP Bangalore

Administrative Sanction for Rs. 100.00 lakhs
Rupees One Crore Only
is accorded under head P-1878
Registered as CE No. 25 Subject to conditions contained in enclosed memo No BBMP/E.E./YNK.D/AS/25/24-25 Dt: 19/10/2024

Executive Engineer

Technical Sanction
Accorded For Rs.100.00 Lakhs
Head of A/C P-1878
CER NO :...80..... Dt:19/10/24